



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/945,445	08/31/2001	Ian Moir	085710.P052	3570

7812 7590 08/25/2005
SMITH-HILL AND BEDELL, P.C.
16100 NW CORNELL ROAD, SUITE 220
BEAVERTON, OR 97006

EXAMINER

STRANGE, AARON N

ART UNIT	PAPER NUMBER
----------	--------------

2153

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/945,445

Applicant(s)

MOIR, IAN

Examiner

Aaron Strange

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 53-100 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 53-100 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Cancellation of claims 1-52 is noted. New claims 53-100 are presented for examination.

Response to Arguments

2. Applicant's arguments with respect to claim 53-100 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 75,76,99, and 100 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

5. With regard to claims 75 and 99, the limitation "the second instruction set is a sub-set of the third instruction set" is not described in the specification. There does not

Art Unit: 2153

appear to be any references to instructions sets at any point in the specification, and certainly not a second instruction set that is a sub-set of a third instruction set.

6. Claims 76 and 100 are rejected by virtue of their dependency from the above claims.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 55, 75, 76, 79, 99 and 100 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. With regard to claims 55 and 79, the limitation "the second section being non-exclusive of the first section" is unclear. The term is not defined by the claim or in the specification. The Examiner recommends that the term claim be amended to recite "the second section including the first section", "wherein the second section may include the first section" or a similar recitation to clearly show how the first and second sections are related.

10. Claims 75 and 99 recite the limitation "the third instruction set" in line 4 and 5 of each claim, respectively. There is insufficient antecedent basis for this limitation in the claim.

11. All claims not individually rejected are rejected by virtue of their dependency from the above claims.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 53-56, 72-74, 77-80, and 96-98 are rejected under 35 U.S.C. 102(e) as being anticipated by Hawkinson (US 6,295, 532).

14. With regard to claim 53, Hawkinson discloses a method of managing network traffic being routed through a network connection device, the network traffic being composed of at least one data packet, and the method comprising:

- (a) receiving at least a first criterion at the network connection device for identifying the traffic flow to which a data packet belongs (Col 4, Lines 34-36),
- (b) receiving at least a second criterion at the network connection device for classifying a traffic flow as belonging to one of at least first (level 1) and second

Art Unit: 2153

traffic flow (level 2) classes (flow class is determined) (Col 4, Lines 36-37 and Col 5, Lines 28-30),

(c) receiving first and second instructions at the network connection device for processing a data packet, the first and second instructions being associated with the first and second flow classes respectively (each flow class receives different Qos) (Col 5, Lines 38-39),

(d) storing the first and second criteria and the first and second instructions on the network connection device (queuing module is located on the network device) (Col 4, Lines 50-64) ,

(e) receiving a first data packet that belongs to the first traffic flow at the network connection device (Col 5, Lines 28-30),

(f) using the first criterion to determine that the first data packet belongs to the first traffic flow (Col 5, Lines 28-30),

(g) using the second criterion to determine the traffic flow class to which the first traffic flow belongs (Col 5, Lines 28-30, and

(h) processing the first data packet according to the instructions associated with the flow class to which the first traffic flow belongs (Col 5, Lines 30-41).

15. With regard to claim 54, Hawkinson further discloses that steps (a), (b) and (c) comprise receiving a pre-compiled file containing the first and second criteria and the first and second instructions (table set) (Col 14, Lines 60-65).

Art Unit: 2153

16. With regard to claim 55, Hawkinson further discloses that step (f) comprises comparing a first section of the first data packet to the first criterion to determine that the first data packet belongs to the first traffic flow and step (g) comprises comparing a second section of the first data packet to the second criterion to determine the traffic flow class to which the first traffic flow belongs, the second section being non-exclusive of the first section (data unit headers are inspected to determine flow/class of data unit)(Col 4, Lines 34-36).

17. With regard to claim 56, Hawkinson further discloses receiving supplemental data pertaining to the first traffic flow, wherein the supplemental data is received outside of the first traffic flow and step (g) further comprises comparing the supplemental data to the second criterion to determine the class to which the first traffic flow belongs (desired QOS is used to generate a flow classification for an unclassified flow) (Col 5, Lines 41-46).

18. With regard to claim 72, Hawkinson further discloses that the first and second instructions pertain to any one of routing, switching, or bridging the network traffic (Col 5, Lines 28-46).

19. With regard to claim 73, Hawkinson further discloses that the first traffic flow originated at a network device (packets are received) (Col 4, Line 66 to Col 5, Line 1) and the method further comprises the step of communicating information regarding the

Art Unit: 2153

first data packet to the network device (TCP packets are supported and TCP packets are acknowledged) (Col 14, Lines 28-49).

20. With regard to claim 74, Hawkinson further discloses that at least one of the first and second criteria and the first and second instructions are provided by a network administrator (Col 14, Lines 29-33).

21. Claims 77-80 and 96-98 are rejected under the same rationale as claims 53-56 and 72-74, since they recite substantially identical subject matter.

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 57-71 and 81-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkinson (US 6,295, 532) in view of Official Notice.

24. With regard to claims 57, and 59-71, while Hawkinson shows substantial features of the claimed invention (discussed above), including that classes are defined using any number of various parameters (Col 10, Lines 25-34), it fails to specifically disclose that

Art Unit: 2153

the supplemental data comprises data concerning access requirements, access rights, traffic conditions, data from a device registry, a work group identifier, or physical characteristics of the network device.

The Examiner takes Official Notice that the use of supplemental data to identify the flow of a data packet was old and well known in the art at the time the invention was made and would have merely been a matter of personal preference of the system administrator, depending on the parameters they wished to use to classify flows. Hawkinson discloses that any parameters could be used to define classes, and it would have been advantageous to use the parameters desired by the system designer to classify flows based on the system requirements.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use any known parameters to classify the flows in order to control the QoS provided to flows based on those parameters.

25. Claims 81 and 83-95 are rejected under the same rationale as claims 59-71, since they recite substantially identical limitations.

26. With regard to claims 58 and 82, Hawkinson further discloses that the first and second instruction specify respective first and second bandwidth allocations (allocated bandwidth depends on flow class) (Col 19/20, Lines 27-28).

Art Unit: 2153

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS
8/19/2005



GLENDON E. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100